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INTENSITY OF AMNESIA DURING HYPNOSIS IS POSITIVELY CORRELATED WITH ESTIMATED PREVALENCE OF SEXUAL ABUSE AND ALIEN ABDUCTIONS: IMPLICATIONS FOR THE FALSE MEMORY SYNDROME [1]

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Summary.—20 normal young women listened to an ambiguous story concerning a young boy who experienced fear, odd smells, and a smothering sensation during the night and skin lesions the next morning. After the Hypnotic Induction Profile (HIP) had been established, they were asked to estimate either the percentage prevalence of childhood sexual abuse or alien abduction in the general population. There were moderate (0.50) positive correlations between the subjects' estimates of prevalence and the amount of amnesia ("lost time") and indices of right-hemispheric anomalies (history of sensed presence and left-ear suppressions during a dichotic-listening task). Relevance of observations to formation of the False Memory Syndrome and to the development of nonpsychotic delusions is discussed.

Amnesia, missing time, or temporal distortions are common correlates of hypnosis (von Kirschenheim & Persinger, 1991). These intervals encourage the creation and recall of experimentally (or iatrogenically) induced pseudomemories (Labelle, Laurence, Nadon, & Perry, 1990). Their intensity and the subjective duration are a function of the amount of temporal distortion (Cooper & Erickson, 1959). Creativity and the capacity to generate vivid images are correlated with both suggestibility and indices of elevated temporal lobe sensitivity (Ross & Persinger, 1987). We hypothesized that the estimate of prevalence of strongly emotional and ambiguous phenomena, specifically child sexual abuse and abduction by alien life forms, should be directly correlated with the amount of amnesia during hypnosis.

Twenty first-year university women (18 to 21 years of age) volunteered (2% bonus) to be subjects for an "hypnosis experiment." They had completed the Personal Philosophy Inventory (Persinger & Makarec, 1993) during a class period. A subsequent session was begun with a brief period to establish rapport; then the subject was seated in a comfortable chair within an acoustic chamber and was asked to listen (audiotape) to an ambiguous story about a boy who feels something in his bedroom late at night; the thing, which smells badly, then covers him and he feels pressure and vibrations over his body. Before fainting he experiences fear and wants his mother. The next morning he awakens, feels stiff, and notes red marks on

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his body [the experience is actually an account of a nocturnal complex partial seizure (the narrative is available from the authors)].[2]

Each subject was then given Spiegel's Hypnotic Induction Profile (Spiegel & Spiegel, 1978) by the first author (proficiency for induction was rated by the second author) who was not aware of the hypothesis. The subject was then read a brief paragraph which discussed public concerns about either child sexual abuse ($n = 10$) or claims by the Roper Report (Hopkins, Jacobs, & Westrum, 1992) concerning abductions by extraterrestrial alien beings ($n = 10$). Both narratives were identical except the words sexual abuse or alien abduction were substituted. The subject was then asked to estimate the prevalence (percentage) of abuse or abduction within the general population. Each subject was then given Richard Robert's Dichotic Word Listening Test because scores on it correlate with complex partial epileptic-like signs and experiences of ego-alien intrusions such as "a sensed presence" (Lavallée & Persinger, 1992).

Mean values of the following measures were compared (standard deviations in parentheses): Hypnotic Induction Profile 6.6 (1.7), amnesia score 1.6 (0.6), complex partial epileptic-like signs (CPELS, from the Personal Philosophy Inventory) 31 (15)%, control cluster 73 (13)%, sense-of-presence cluster 19 (26)%, numbers of left-ear suppressions 9.5 (9.0), numbers of right-ear suppressions 2.8 (2.8), and log (base) 10 estimates of prevalence 0.95 (0.72). One-way analysis of variance indicated no statistically significant differences between the groups who were asked to estimate the prevalence of child abuse vs the alien abduction on any of these measures; consequently the groups were combined.

Spearman *rho* correlations were calculated between the measures. Estimates of percentage of prevalence of sexual abuse or alien abduction were significantly ($p < .01$) correlated with the rating of amnesia during hypnotic induction (0.52) and a history of a sensed presence (0.57) but not with numbers of either right- or left-ear suppressions. Although amnesia was associated with the numbers of left-ear suppressions (0.52) and sense of presence (0.60), it was not significantly correlated with right-ear suppressions (-0.12). Complex partial epileptic-like signs were significantly correlated (0.71) with numbers of left-ear suppressions only; the intercorrelations between left-ear suppressions, complex partial epileptic-like signs, and sensed presence confirmed previous values (Lavallée & Persinger, 1992). Interestingly, there was a significant negative association between the score for the control cluster (control for yes responding) and numbers of right-ear errors

[2]The narrative is on file in Document NAPS-05058. Remit $10.75 for photocopy or $4.00 for fiche to National Auxiliary Publications Service, c/o Microfiche Publications, POB 3513, Grand Central Station, New York, NY 10163.

(– 0.50). Complex partial epileptic-like signs, control, or Hypnotic Induction Profile scores were not significantly correlated with any of the other measures.

Partial correlation analyses did not change the significance of the association between estimated prevalence and amnesia when either the complex partial epileptic-like signs ($r = 0.58$), left-ear suppressions (0.62), or scores for the control cluster (0.61) were held constant; however, that association was no longer significant when the variance associated with a history of sensed presence was removed (partial $r = 0.35$). Because behavioral awareness (consciousness) and the sense of self are strongly associated with left-hemispheric processes, we have postulated and found that intermittent intrusions of the right-hemispheric sense of self should be associated with personal histories of dissociation and life experiences of a sense of presence (Persinger, 1992).

The present results suggest that the association between a history of sensed presence and the exhibition of more intense indicators of amnesia during hypnosis are associated with amplified estimates of the prevalence of two apparently distinct (but exotic) phenomena, namely, childhood sexual abuse and abductions by extraterrestrial aliens which is the modern analogue of fairy and spiritual abductions (Evans, 1984). If this amplification process is valid, then the propensity for women who have undergone hypnosis to accommodate putative incest images after they have read ambiguous exotic suggestions (e.g., Bass & Davis, 1988) to "recall" events that expand to occupy more and more time as a function of the number of hypnotic sessions could constitute an iatrogenic phenomenon (Wakefield & Underwager, 1992). The observation of this characteristic among normal university women suggests that it is not unique to those who request clinical intervention.

The reduction of the association between amnesia and estimates of prevalence after covariance for a sense of presence suggests that right-hemispheric intrusions are associated with dissociative periods (lost time) that affect the person's estimates of magnitude. If this effect is generalizable, then a quantitative relationship between amplified estimates and nonpsychotic delusions, which are in large part defined by the magnitude of their pervasiveness in the person's world view, should also exist. If the content of pseudomemories (a less intense form of confabulation) that can be developed in response to amnesic episodes is determined by incidental (peripheral) information (Bartholomew, Basterfield, & Howard, 1991), then estimates of prevalence for phenomena that receive generalized media coverage may be subjectively inflated. The content should be dominated by contemporary apprehensions, e.g., satanic cults, date rape, or alien visitations, rather than by themes that are similar but no longer contemporary, e.g., communist infiltration, gypsies, invasion by the Spanish (a late nineteenth century preoccupation), as foci of anxiety.

REFERENCES

BARTHOLOMEW, K., BASTERFIELD, K., & HOWARD, G. S. Abductees and contactees: psychopathology or fantasy proneness? *Professional Psychology: Research and Practice*, 1991, 22, 215-222.

BASS, E., & DAVIS, L. *The courage to heal: a guide for women survivors of child sexual abuse*. New York: Harper & Row, 1988.

COOPER, L. F., & ERICKSON, L. H. *Time distortion in hypnosis*. Baltimore, MD: Williams & Williams, 1959.

EVANS, H. *Visions, apparitions and alien visitors*. Wellingborough (Northamptonshire): Aquarian Press, 1984.

HOPKINS, B., JACOBS, D. M., & WESTRUM, R. The UFO Abduction Syndrome. In Roper Organization, *Unusual personal experiences*. Las Vegas, NV: Bigelow, 1992. Pp. 9-50.

LABELLE, L., LAURENCE, J-R., NADON, R., & PERRY, C. Hypnotizability, preference for an imagic cognitive style and memory creation in hypnosis. *Journal of Abnormal Psychology*, 1990, 99, 222-228.

LAVALLÉE, M., & PERSINGER, M. A. Left ear (right temporal lobe) suppressions during dichotic listening, ego-alien intrusion experiences and spiritualistic beliefs in normal women. *Perceptual and Motor Skills*, 1992, 75, 547-551.

PERSINGER, M. A. Right hemisphericity, low self-esteem, and unusual experiences: a response to Vingiano. *Perceptual and Motor Skills*, 1992, 75, 568-570.

PERSINGER, M. A., & MAKAREC, K. Complex partial epileptic-like signs as a continuum from normals to epileptics: normative data and clinical populations. *Journal of Clinical Psychology*, 1993, 49, 33-45.

ROSS, J., & PERSINGER, M. A. Positive correlations between temporal lobe signs and hypnosis induction profiles: a replication. *Perceptual and Motor Skills*, 1987, 64, 828-830.

SPIEGEL, H., & SPIEGEL, D. *Trance and treatment*. New York: Basic Books, 1978.

VON KIRSCHENHEIM, C., & PERSINGER, M. A. Temporal distortions during hypnotic versus relaxation procedures. *Journal of Experimental and Clinical Hypnosis*, 1991, 39, 63-66.

WAKEFIELD, H., & UNDERWAGER, R. Uncovering memories of alleged sexual abuse: the therapists who do it. *Issues in Child Abuse Accusations*, 1992, 4, 197-213.

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